

DP-300566

METHOD OF MAKING A SENSOR AND THE PRODUCT PRODUCED
THEREFROM

ABSTRACT OF THE INVENTION

A conductive co-fired body for an electrochemical cell for an exhaust sensor comprises zirconia, yttrium oxide, and alumina. The body comprises about 15 to about 30 weight% monoclinic phase zirconia. This produces an electrochemical cell having low impedance wherein the zirconia body and alumina body are co-fired. One method for manufacturing the electrochemical cell comprises combining zirconia, yttria, and alumina with solvent and dispersant to form a mixture. After, binder is added to the mixture which is then de-aired and cast onto a tape surface. The tape is dried, metallized, and laminated to an unfired alumina surface. The structure is then co-fired to form a body for said electrochemical cell.